

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION N	О.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,771		09/21/2001	David N. Pether	00-335 1496.00154	5402
24319	7590	02/17/2004		EXAMINER	
LSI LOGIC CORPORATION				nguyen, hau h	
1621 BARBER LANE MS: D-106 LEGAL				ART UNIT	PAPER NUMBER
MILPITAS, CA 95035			2676		
				DATE MAILED: 02/17/2004	1

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary Examiner	-							
Examiner Hau H Nguyen 2676 The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 22 December 2003.	PETHER, DAVID N.							
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 22 December 2003.								
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 22 December 2003.								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) ■ Responsive to communication(s) filed on <u>22 December 2003</u> .								
THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) ■ Responsive to communication(s) filed on 22 December 2003.	• •							
1) Responsive to communication(s) filed on <u>22 December 2003</u> .								
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is								
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims								
4)⊠ Claim(s) <u>1-22</u> is/are pending in the application.								
4a) Of the above claim(s) <u>6</u> is/are withdrawn from consideration.								
☐ Claim(s) is/are allowed.								
6)⊠ Claim(s) <u>1-5,7-22</u> is/are rejected.								
7) Claim(s) is/are objected to.								
8) Claim(s) are subject to restriction and/or election requirement.								
Application Papers								
9) The specification is objected to by the Examiner.								
) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) ☐ All b) ☐ Some * c) ☐ None of:								
1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s)								
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date								
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) Check the proper No(s)/Mail Date								

Art Unit: 2676

Response to Arguments

1. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new grounds of rejection. In response to Applicant's arguments that reference Zhang et al. (U.S. Patent No. 6,181,711) does not teach all the limitations of the claims, the examiner disagrees. With reference to Fig. 5, Zhang et al. teach the outputs of the modification units 514, 516, 518 are in turn coupled to respectively to the DCT VLC encoder 520, the motion vector VLC encoder 522, the auxiliary information encoder 524. Each of the encoders 520, 522, 524 codes the data back into the compressed format. The outputs of the encoders 520, 522, 524 are then combined by stream bit multiplexer 526 (a composite circuit). Zhang et al. further teach other functions the modification units 514, 516, 518 may perform include and involve modules, such as: changing the resolution of the video images; completely decoding the bit stream, adding low pass spatial filtering to the decoded digitized video images (col. 12, lines 10-64, and col. 13, lines 1-5).

In regard to reference Porter (U.S. Patent No. 6,208,354), Porter teaches a modification circuit and composite circuit as shown in Fig. 2 steps 120 and 122 (col. 7, lines 23-33). As also shown in Fig. 1, Porter teach the system also comprises an alpha blending circuit 32, which perform spatial combining.

Reference Moreton et al. (U.S. Patent No. 5,835,729) teaches a method to interleave separate color space components data that meets the minimum requirements of the independent claims, wherein as shown in Fig. 4 separate the interleaved luminance and chrominance component data of DIN(63:00) input signals into separate streams (col. 5, lines 42-45), and combined again to produce output stream Dout (63:00).

Art Unit: 2676

Since all the references meet the minimum requirements of the claimed features, rejections are still maintained.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-3, 9-11, 13, 18-19, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al. (U.S. Patent No. 6,181,711).

Referring to claims 1-3, 13, and 22, as shown in Fig. 4, Zhang et al. teach a method for transporting a compressed video and data bit stream comprising a plurality of modification circuits 404-408 coupled to received video streams parsed from a decoder and extractor 402 (col. 10, lines 20-24, and lines). With reference to Fig. 5, Zhang et al. teach the outputs of the modification units 514, 516, 518 are in turn coupled to respectively to the DCT VLC encoder 520, the motion vector VLC encoder 522, the auxiliary information encoder 524. Each of the encoders 520, 522, 524 codes the data back into the compressed format. The outputs of the encoders 520, 522, 524 are then combined by stream bit multiplexer 526 (a composite circuit). Zhang et al. further teach other functions the modification units 514, 516, 518 may perform include and involve modules, such as: changing the resolution of the video images; completely

Art Unit: 2676

decoding the bit stream, adding low pass spatial filtering to the decoded digitized video images (col. 12, lines 10-64, and col. 13, lines 1-5).

Referring to claims 9-10, and 18 Zhang et al. also teach the modification circuits 514-518 performing scaling and filtering (col. 12, lines 16-64).

In regard to claims 11 and 19, Zhang et al. teach the outputs of the encoders 520, 522, 524 (Fig. 5) are combined by stream bit multiplexer 526 (col. 13, lines 1-5) (bitwise logical operations).

Referring to claim 21, Zhang et al. teach the data streams output from the decoder and extractor 402 produces three different format input streams and provide them to respective modification circuits 404-408 (col. 10, lines 24-30).

4. Claims 1, 4-5, 12-15, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Porter (U.S. Patent No. 6,208,354).

Referring to claims 1, 4-5, 12-15, and 20, Porter teaches a method and apparatus for storing and displaying multiple graphical images in a mixed video and graphics display, wherein as shown in Fig. 1, a display overlay engine 30 is coupled to receive video data stream 16 and graphics data streams 28 to produce display out signal 35. As shown in Fig. 2, at step 120, Porter teaches the selected graphics image is blended with a portion of an additional display data stream to produce a portion of the display output stream. Thus in a system where the additional display data stream is a video data stream, the selected graphics image will be blended with the incoming video stream to produce the display output stream. The blending operation may include an alpha blending operation as described above with respect to FIG. 1. The blending of

Art Unit: 2676

the selected graphics image with the additional display data stream causes the two streams to be merged to produce the display output signal (a composite circuit) (col. 7, lines 6-18).

5. Claims 1, 7-8, 13, 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Moreton et al. (U.S. Patent No. 5,835,729).

Referring to claims 1, 7-8, 13, 16-17, Moreton et al. teach a method an arrangement to separate the interleaved color space components in one data stream with minimum CPU intervention, and an arrangement to interleave separate color space components data with minimum CPU intervention (col. 2, lines 20-26). As shown in Fig. 4, Moreton et al. teach data signal DIN(63:00) is held constant for one clock cycle in order to separate the interleaved luminance and chrominance component data of DIN(63:00) input signals into separate streams (col. 5, lines 42-45), and combined again to produce output stream Dout (63:00).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2676

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hau H. Nguyen whose telephone number is: 703-305-4104. The examiner can normally be reached on MON-FRI from 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 703-308-6829.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D. C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377. Marker (Bella

H. Nguyen

02/13/2004

MATTHEW C. BELLA SUPERVISORY PATENT EXAMINER **TECHNOLOGY CENTER 2600**